



Research

Obamacare's Impact on Small Business Wages and Employment

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American Action Forum (AAF) research finds that Affordable Care Act (ACA) regulations are reducing small business (20 to 99 workers) pay by at least \$22.6 billion annually. In addition, ACA regulations and rising premiums have reduced employment by more than 350,000 jobs nationwide, with five states losing more than 20,000 jobs.

The relationship between rising premiums and lower pay was already well known in academic literature. Our research simply measured how the ACA has affected the relationship between health insurance premiums, small business wages, and employment. While there was no significant relationship between healthcare premiums and employment before the ACA, since 2010 small businesses have slowly started shedding jobs and reducing wages. We found that, on average, employees who work a full year for a business with 50-99 employees lose \$935 annually due to ACA regulations, while employees of businesses with 20-49 employees, on average lose \$827.50 annually.

INTRODUCTION

The ACA imposes several burdensome regulations that could potentially harm job and wage growth, including the employer mandate and requirements on the generosity of coverage. Under the ACA, employers with 50 or more full-time employees are required to provide health insurance for their workers or pay a fine. In addition, the ACA enforces rules that govern the type of insurance plans they can provide and restricts their options in choosing low-cost coverage. When employers are required to provide health insurance and their low-cost options are limited, costs will naturally rise and companies will be more responsive to changes in insurance premiums. As a result, employees are less insulated from insurance premium growth, and if premiums rise considerably under the ACA, then employers could be more likely to offset those costs by cutting jobs or wages.

Today, the central difficulty in analyzing the labor market implications of ACA regulations is that most significant rules have only been recently implemented. For instance, the employer mandate was scheduled for January 1, 2014, but the White House delayed the mandate to [January 1, 2015](#), and then delayed it again to January 1, 2016 for businesses with 50 to 99 employees.

Although central portions of the ACA are not yet fully enforced, however, it does not mean the law is not affecting the labor market. As employers have prepared for the coming regulations, it is likely that they have become more sensitive to premiums.

METHODOLOGY

In this paper, we examine whether businesses have become responsive to health insurance premiums since the ACA and whether that relationship is affected by the additional requirements on businesses with more than 50 employees. We estimate the relationship between health insurance premiums and labor conditions both before

and after the ACA. Moreover, it is important to compare companies with fewer than 50 employees to those with more than 50. Businesses with close to 50 employees are likely to have similar characteristics. However, under the ACA, one group does not have to provide health insurance while the other does. By comparing these two groups, we can get a more precise idea of how the ACA is affecting employer responsiveness to health insurance premiums, both for those who are required to provide health insurance and those who are not. To accomplish this, we separately examine firms with 20 to 49 employees and those with 50 to 99 employees.

DATA AND EMPIRICAL MODEL

To analyze the relationship between the ACA, health insurance premiums, and labor market conditions, we estimate how changes in premiums relate to annual average state employment and average weekly pay in private businesses with 20 to 49 workers and those with 50 to 99 workers before and after the ACA. We employ state-level labor market data from the Bureau of Labor Statistics (BLS) and use average annual employment and average weekly pay for both business sizes.^[1] Meanwhile, we use premium data from the Medical Expenditure Panel Survey (MEPS) for the same period.^[2] Our data set includes observations on all 50 states in each year from 2003 to 2012.^[3]

We perform a series of fixed effects regressions that estimate the impact of premiums on average weekly pay in firms with 20 to 49 workers, average weekly pay in firms with 50 to 99 workers, average total annual employment in firms with 20 to 49 workers, and average total annual employment in firms with 50 to 99 workers. Each regression contains both state and year effects. The use of state effects controls for characteristics that vary across industries, but not over time, and the use of year effects controls for factors that vary over time, but not by state. The year effects account for macroeconomic forces during this period, such as loss in employment due to the Great Recession.

PRE- AND POST-ACA

Within each regression, we estimate the impact of premiums on weekly pay (or employment) both before and after the ACA became law. We are able to accomplish this by including an average premiums variable and an interaction term that multiplies average premiums by an ACA binary variable. For all years pre-ACA (2003-2006, 2008-2009), the binary variable equals zero and the interaction term drops from the model. As a result, the coefficient on the average premium variable estimates the impact of premiums before the ACA. However, for the post-ACA years (2010-2012), the ACA binary variable equals 1 and the sum of the coefficients for the average premium variable and the interaction term estimates the impact of premiums on employment and pay after the ACA.

THREE TYPES OF PREMIUMS

For each of the four dependent variables, we run three different fixed effects regressions, using different types of premiums. This results in 12 regressions. We test how total average premium, average premium paid by employers, and average premium paid by employees relate to each of the four dependent variables.^[4] By testing the different types of premiums, we examine how total premiums relate to decisions on number of workers and employee pay and identify the part of the premium that affects wages and jobs.

Separating employer premium from employee premium has the main benefit of providing a more direct link between additional costs to the employer and resulting pay cuts or job losses for the employees. However, the

employee and employer premium data are far noisier than the total premium data, which are the sum of the two. Although less direct, total premiums provide a more precise estimate of the relationship between premiums and pay or employment.^[5]

ADDITIONAL CONTROLS

In our model, we control for additional factors that may influence employment and pay. To control for state educational levels, we include a variable for the percent of working-age adults (25 years and older) who have a bachelor's degree.^[6] We include the percentage of workers employed in the services industry, as this helps to control for state industrial mix.^[7] We also control for the state's top marginal tax rate,^[8] and population.^[9]

Finally, any fixed effects model can face the problem of autocorrelation, in which a variable is correlated with itself over time and biases the results. Our model addresses this issue by using heteroskedasticity- and autocorrelation-consistent standard errors.

RESULTS

In assessing the significance of our results, we test the hypothesis that coefficients are non-zero for both pre- and post-ACA coefficients.^[10] But we also apply an additional test to post-ACA coefficients to assess whether the relationship is significantly different from the pre-ACA comparison group. In reporting significance levels for post-ACA coefficients, we denote the lowest level of significance achieved by both tests. In all cases but one where we are able to identify statistically significant results, the post-ACA relationships are stronger and more negative.

Table 1: Impact on Jobs

	Small Firms (20 – 49 Employees)				Large Firms (50 – 99 Employees)			
	Pre-ACA		Post-ACA		Pre-ACA		Post-ACA	
Total Premium	0.027		-0.093	**	-0.053		-0.003	
Employer Contribution	0.074	*	-0.055	***	-0.015		0.026	
Employee Contribution	-0.047	*	-0.039	†	-0.031		-0.030	
* 0.1 level of significance								
** 0.01 level of significance								

Table 1: Impact on Jobs

*** 0.001 level of significance

† Estimate is significantly different from 0 but not from comparison group.

Table 1 displays the results of our analysis on the effect of the ACA health insurance requirements on job levels. We find that, for the smaller businesses in our sample (20-49 employees), a one percent increase post-ACA in total health insurance premiums is associated with a 0.093 percent decrease in jobs, whereas there was no discernable relationship pre-ACA. A one percent, post-ACA increase in employer health insurance contributions is correlated with a 0.055 percent decrease in jobs, whereas prior to the ACA, a one percent increase in employer contributions was correlated with a 0.074 percent increase in jobs. Pre-ACA, a one percent increase in employee health insurance contributions is correlated with a 0.047 percent decrease in jobs and has not substantially changed with the passage of the ACA. We do not find any statistically significant relationships between health insurance premiums and jobs in businesses with between 50 and 99 employees.

Table 2: Impact on Weekly Pay

	Small Firms (20 – 49 Employees)				Large Firms (50 – 99 Employees)			
	Pre-ACA		Post-ACA		Pre-ACA		Post-ACA	
Total Premium	0.077	*	-0.031	*	0.017		-0.109	*
Employer Contribution	0.068	*	-0.028	*	0.025		-0.085	*
Employee Contribution	-0.006		-0.009		-0.014		-0.018	
* 0.1 level of significance								

Table 2 examines the impact of the ACA's health insurance regulations on weekly pay. For businesses with between 20 and 49 employees, we find that a one percent, post-ACA increase in total health insurance premiums is associated with a 0.031 percent decrease in wages, in contrast with a positive correlation of 0.077 percent prior to the ACA. Similarly, a one percent increase in employer health insurance contributions is associated with a 0.028 percent decrease in wages post-ACA and a 0.068 percent increase pre-ACA.

Unlike our job level findings, we report stronger post-ACA relationships between health insurance premiums and wages for employers with between 50 and 99 employees. A one percent increase in total insurance premiums post-ACA is associated with a 0.109 percent decrease in wages, and a one percent increase in employer health insurance contributions post-ACA is associated with a 0.085 percent decrease in wages. We do

not identify any statistically significant relationships between wages and health insurance premiums prior to the ACA for larger employers in our data, and we do not find a statistically significant relationship between employee health insurance contributions and wages in either time period or business size category.

IMPLICATIONS

Although the estimates might appear small, when one considers how premiums have changed since the ACA, the costs are profound. Pre-ACA, total premiums in an average state cost \$4,653 in 2009 and grew by 19.8 percent to \$5,576 by 2013.

What does this mean for worker pay? For businesses with 50 to 99 workers, we found that a one percent increase in total premiums has been associated with a 0.109 percent decrease in average weekly pay since the ACA. So a 19.8 percent increase in total premiums is associated with a 2.2 percent decrease in average weekly pay. This is consistent with past research from the Journal of Labor Economics, suggesting a double-digit increase in premiums reduced wages by [2.3 percent](#). Accordingly, our results suggest that the average weekly pay of \$831 in 2013 was 2.2 percent lower than it would have been absent the ACA, costing workers \$18.70 per week.^[11] Moreover, if employees work all year, our results suggest that ACA regulations are costing them on average \$935 annually.

Nationally, about 14.8 million worked for businesses with 50 to 99 employees. If we conservatively assume that half of them work year round and half work for only half the year, the employer mandate costs workers about \$10.8 billion annually.

Table 3 illustrates how the rise in premiums in each state since the ACA has resulted in weekly pay cuts and annual income losses.

INCOME LOSSES IN BUSINESSES WITH 50-99 WORKERS SINCE ACA BECAME LAW

Table 3: Premium Increases and Resulting Income Losses since ACA became Law in Businesses with 50-99 Workers

State	Premium Increase	Loss in Weekly Pay (\$)	Loss in Annual Earnings (\$)
Alabama	12.0%	9.97	498.41
Alaska	21.9%	23.61	1,180.29
Arizona	22.6%	19.93	996.45
Arkansas	22.0%	16.83	841.59
California	20.5%	22.64	1,132.14

Table 3: Premium Increases and Resulting Income Losses since ACA became Law in Businesses with 50-99 Workers

Colorado	24.0%	25.41	1,270.69
Connecticut	22.3%	32.83	1,641.60
Delaware	19.8%	17.28	863.89
Florida	19.9%	17.84	892.13
Georgia	14.5%	14.34	717.19
Hawaii	24.0%	20.13	1,006.47
Idaho	18.1%	13.40	670.06
Illinois	23.3%	25.21	1,260.28
Indiana	25.8%	20.73	1,036.46
Iowa	16.9%	13.31	665.64
Kansas	28.2%	24.26	1,212.94
Kentucky	21.2%	16.88	843.76
Louisiana	9.0%	7.88	394.19
Maine	14.6%	11.11	555.26
Maryland	17.7%	18.35	917.53
Massachusetts	19.4%	24.78	1,238.93
Michigan	8.2%	7.62	380.93
Minnesota	14.7%	14.69	734.41

Table 3: Premium Increases and Resulting Income Losses since ACA became Law in Businesses with 50-99 Workers

Mississippi	11.0%	7.66	383.20
Missouri	23.9%	20.18	1,008.81
Montana	24.4%	18.69	934.74
Nebraska	22.1%	17.83	891.72
Nevada	11.7%	10.66	533.14
New Hampshire	19.6%	18.44	922.22
New Jersey	26.5%	33.59	1,679.37
New Mexico	15.8%	11.79	589.27
New York	20.2%	26.99	1,349.31
North Carolina	11.6%	9.72	486.25
North Dakota	29.1%	29.76	1,488.19
Ohio	33.3%	29.36	1,467.92
Oklahoma	20.9%	18.33	916.50
Oregon	16.4%	14.97	748.63
Pennsylvania	17.5%	17.23	861.54
Rhode Island	18.0%	15.96	798.05
South Carolina	20.5%	15.29	764.43
South Dakota	37.9%	28.63	1,431.58

Table 3: Premium Increases and Resulting Income Losses since ACA became Law in Businesses with 50-99 Workers

Tennessee	13.1%	11.41	570.34
Texas	19.7%	21.02	1,050.87
Utah	24.7%	21.40	1,069.91
Vermont	15.3%	12.55	627.41
Virginia	17.8%	18.74	937.02
Washington	15.6%	15.98	798.99
West Virginia	26.4%	22.33	1,116.26
Wisconsin	11.7%	9.96	497.86
Wyoming	34.0%	32.19	1,609.58